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# Mobile County Commission

205 Government Street  
Mobile, Alabama 36644



## Storm Water Management Program (SWMP) Plan

NPDES Permit No. ALR040043

March 2022

Prepared By:



2124 Moore's Mill Road ♦ Suite 120 ♦ Auburn, Alabama 36830

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# SECTION 1

Program Administration



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# 1. Program Administration

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## 1.1. Introduction

In 1990, the U.S. Environmental Protection Agency (EPA) promulgated regulations establishing Phase I of the National Pollutant Discharge Elimination Systems (NPDES) storm water program. The Phase I program for municipal separate storm sewer systems (MS4s) requires operators of “medium” and “large” MS4s that generally serve populations of 100,000 or greater to implement a storm water management program to control polluted discharges from certain municipal, industrial, and construction activities into the MS4.

In 1999, EPA promulgated regulations establishing Phase II of the NPDES storm water program. The Phase II program extends coverage of the NPDES storm water program to regulated “small” MS4s. A regulated “small” MS4 is defined as an MS4 located within an “urbanized area” as defined by the Census Bureau or as designated by the NPDES permitting authority.

The Alabama Department of Environmental Management (ADEM) presently has primary jurisdiction over permitting and enforcement of the Storm Water Program for Alabama. On 16 September 2021, ADEM issued MS4 Phase II General Permit (NPDES Number ALR040043) for storm water discharges associated with the Mobile County MS4.

The Storm Water Management Program (SWMP) Plan has been developed to generally describe Mobile County’s efforts to maintain compliance with the requirements of NPDES Permit ALR040043. This document is intended to be a dynamic document and shall be revised as needed to accurately reflect the County’s activities in implementing its SWMP.

## 1.2. Legal Authority

### 1.2.1. Legislative Act 2005-200

On 26 May 2005, the Alabama Legislator passed Act Number 2005-200 known as “The Alabama Limited Self-Governance Act.” This act expands the authority of counties to regulate activities that may create a nuisance to include:



- Weeds;
- Litter or rubbish;
- Animals and animal nuisances;
- Junkyards;
- Noise;
- Unsanitary sewage; and,
- Pollution creating a public nuisance.

The act also restricts the powers of a county commission and prohibits the following activities as they relate to a nuisance.

- Authority to levy or collect any tax;
- Regulation over any business activities regulated by the Federal Surface Transportation Board, the Public Service Commission, the Department of Agriculture and Industries, or the Alabama Department of Environmental Management.
- Action affecting any court;
- Action affecting any public-school system;
- Action affecting pari-mutuel betting facility;
- Action affecting the private or civil law governing private or civil relationships;
- Action extending the power of regulation over the construction maintenance, operation, or removal of facilities used in the generation, transmission, or distribution of water, sewer, gas, telecommunications, or electric utility services;
- Action affecting the rights granted to an agricultural, manufacturing, or industrial plant or establishment, or farming operation;
- Action affecting or enforcing environmental easements; and,
- Action restricting or regulating surface mining or underground mining activities that have been granted federal or state permits.

Since Mobile County has limited legal authority to implement and/or enforce some requirements of the NPDES permit, the County shall rely upon State programs to assist in the implementation and enforcement of its SWMP Plan.

A copy of The Alabama Self Governance Act is provided in Appendix A.



### **1.2.2. Subdivision Regulations**

On 13 December 2004, the County Commission adopted Subdivision Regulations. These regulations established procedures and standards for the design and development of proposed subdivisions or additions to existing subdivisions within the subdivision jurisdiction of the County.

The latest version of the Subdivision Regulations is incorporated into the SWMP Plan by reference. A copy of the Subdivision Regulations is provided in Appendix A.

### **1.2.3. Design and Construction Guidelines**

The County has developed the following documents to provide requirements for the design and construction of major subdivisions and commercial sites:

- Construction Specifications and Engineering Requirements for Subdivisions;
- Commercial Site Plan Requirements; and,
- Engineered Site Plan Requirements.

Select components include:

- Requires ADEM NPDES permit for qualifying developments;
- Requires a signed and sealed Certificate of Professional Engineering Design for Acceptance of a Subdivision in Mobile County;
- Prior to any land disturbing activity, a “Permit to Develop” shall be obtained;
- Post-construction certification requirements; and,
- Requires that the contractor shall adhere to The Alabama Handbook for Erosion Control, Sediment Control, and Stormwater Management on Construction Sites and Urban Areas.

A copy of the documents is provided in Appendix A.

### **1.2.4. Junk Control Ordinance**

On 1 October 2017, the County has developed, adopted, and implemented a Junk Control Ordinance to regulate junk and the accumulation of litter, rubbish, and junk. The Junk Control Ordinance has been amended several times since its initial adoption. Components of the Junk Control Ordinance include the following:



- Definitions;
- Control of Junk, Litter, and Rubbish;
- Penalties;
- Record Keeping;
- Applicability; and,
- Severability.

The Environmental Enforcement department is responsible for enforcing the Junk Control Ordinance and Alabama State Litter Laws in the unincorporated areas of the County. A copy of the Junk Control Ordinance is provided in Appendix A.

### **1.2.5. Flood Damage Prevention Ordinance**

On 11 March 2010, the County adopted the latest revisions to the Flood Damage Prevention Ordinance. The purpose of this ordinance is to promote public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specific areas of provisions designed to:

- Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which increase flood heights, velocities, or erosion;
- Control filling, grading, dredging, and other development which may increase flood damage or erosion;
- Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands; and,
- Control the alteration of natural flood plains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters.

The latest version of the Flood Damage Prevention Ordinance is incorporated into the SWMP Plan by reference. A copy of the current Flood Damage Prevention Ordinance is provided in Appendix A.



### 1.3. SWMP Revision

Revisions to the SWMP Plan shall be documented in Table 1-1.

**Table 1-1 Program Revision Record**

Date:	Revised By:	Description of Revision:
December 2017	Mobile County	Incorporate findings of ADEM Audit
March 2023	Hydro Engineering Solutions	Incorporate new permit requirements and 2020 Urbanized Areas

### 1.4. Program Administration

The Mobile County Commission is the body responsible for providing the mandates and resources required to implement the SWMP. The Environmental Services Department is responsible for coordination and management of the County’s SWMP. Departments involved and the activities they perform are summarized below:

#### Environmental Services

- Administers SWMP and permit compliance
- Coordinates public education and involvement activities
- Staff training
- Water quality sampling
- Outfall screening
- Non-hazardous and hazardous spill response
- Preparation of SWMP Plan
- Preparation of Annual Report



**Engineering Department**

- Design and construction management of County roads and bridges

**Public Works Department**

- Inspects and maintains rights-of-way and easements
- Performs drainage infrastructure inspections and repairs

**Inspection Services Department**

- Construction and land disturbance permitting
- Plan reviews
- Construction site and building inspections
- Enforcement of construction regulations
- Flood damage prevention ordinance implementation

DRAFT



## 1.5. Signatory Requirements

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

---

Tina Sanchez  
Environmental Services Director

Date

Address: Mobile Government Plaza  
205 Government Street  
Mobile, Alabama 36641-1600

Phone: (251) 574-3229

A letter from Honorable Merceria Ludgood, President of the Mobile County Commission, delegating the Mobile County Environmental Services Director, Tina Sanchez, as the Duly Authorized Representative for the Mobile County Commission.



## SECTION 2

MS4 Area



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## 2. MS4 Area

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### 2.1. MS4 Area

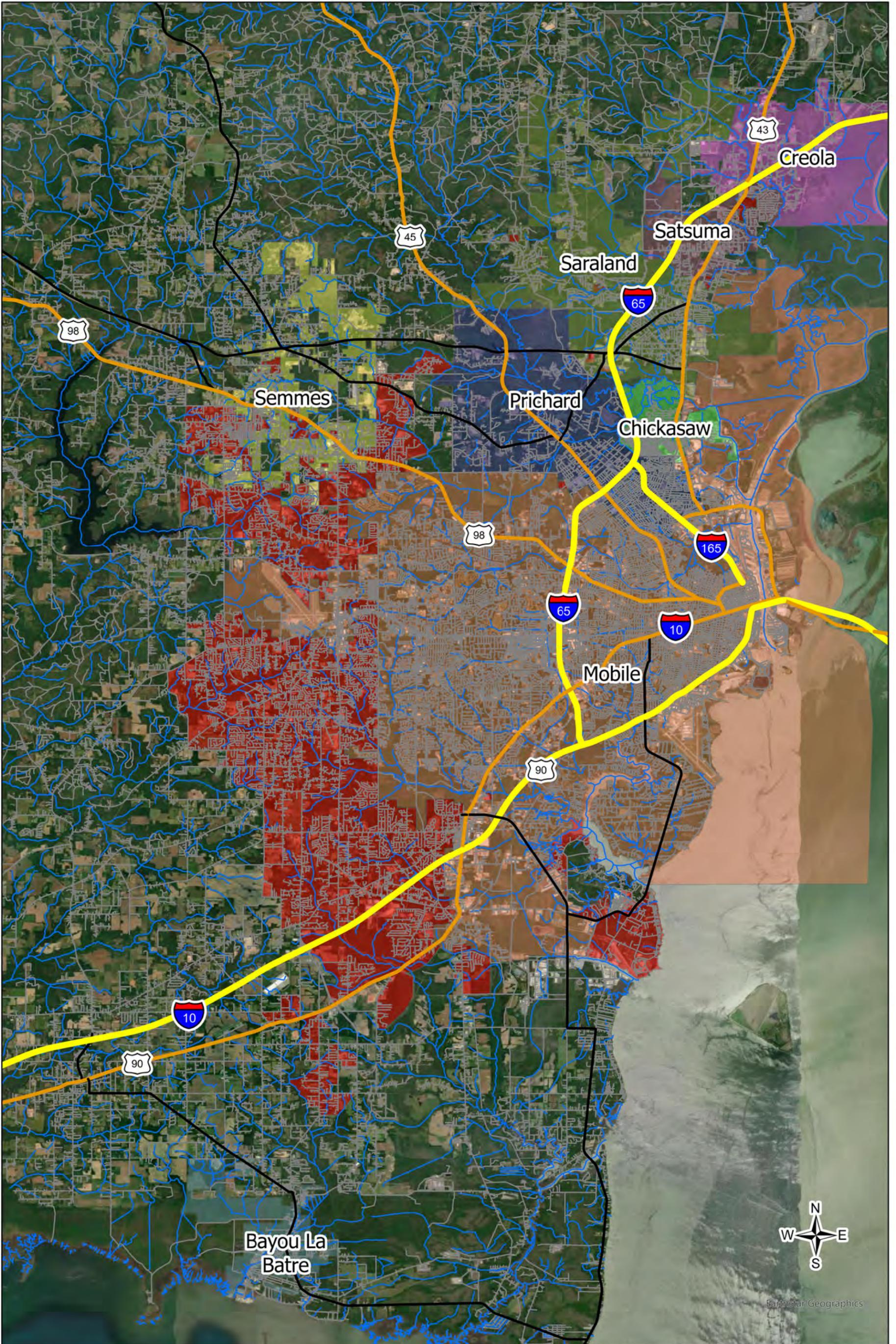
Mobile County is located adjacent to Mobile Bay in the southwestern corner of Alabama. The County occupies approximately 1,644 square miles, with approximately 1,229 square miles of land and 415 square miles of water.

Cities located within the County include Bayou La Batre, Chickasaw, Citronelle, Creola, Mobile, Prichard, Saraland, Satsuma, and Semmes. The 2020 population of Mobile County is 414,809. As compared to the population in 2010, Mobile County has experienced a population increase of 1,817 (approximately 0.4%).

In accordance with 40 CFR 122.32, only portions of the County located within an unincorporated area of the Urbanized Area are regulated as a small MS4 under the NPDES storm water program. Unincorporated portions of the County that are located within an urbanized area and regulated as a small MS4 are shown in Figure 2-1.

#### 2.1.1. Climate

Mobile County's geographical location on the Gulf of Mexico provides a mild subtropical climate, with hot, humid summers and mild, rainy winters. Average high and low temperatures in January are 60.8°F and 40.0°F, respectively. Summer temperatures average 91.0°F in July with highs exceeding 90°F for more than 75 consecutive days per year. The area receives approximately 66 inches of rainfall annually. Rainfall tends to be consistent throughout the year with wetter periods occurring during the summer and early fall months. Mobile County is occasionally affected by major tropical storms and hurricanes which can produce copious amounts of rainfall in a very short period of time. Significant snow fall events are rare in Mobile County. Average monthly rainfall and temperatures are summarized in Figure 2-2.



 Bayou La Batre	 Mobile	 Satsuma
 Chickasaw	 Prichard	 Semmes
 Creola	 Saraland	 MS4 Area



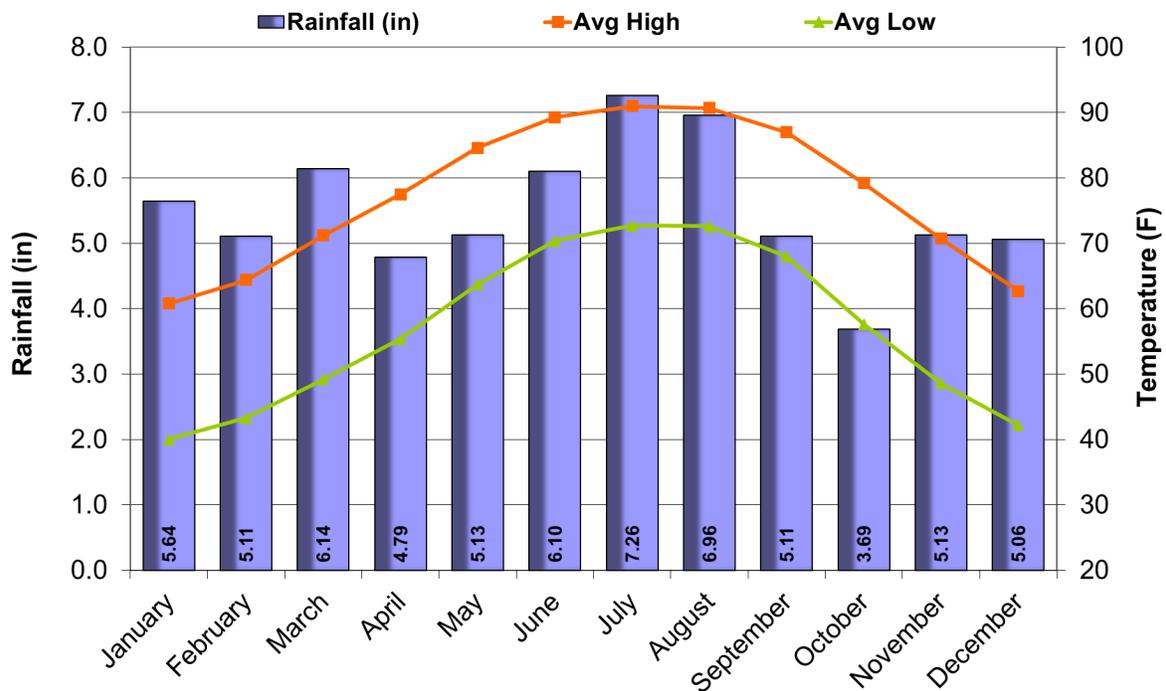
**Mobile County**  
MS4 Area

**Figure 2.1**  
March 2023

Earthstar Geographics



Figure 2-2 Average Monthly Rainfall and Temperatures



## 2.2. Known Problems

Section 303(d) of the Clean Water Act (CWA) establishes that states are to identify and list waters (rivers, streams, etc.) for which technology-based limits alone do not ensure attainment of applicable water quality standards. The 303(d) list of impaired waters will include a priority ranking for establishment of Total Maximum Daily Loads (TMDLs) for these waters. The state will establish a TMDL that will meet water quality standards for impaired streams, considering seasonal variations and a margin of safety that accounts for uncertainty. TMDLs establish the maximum amount of a pollutant that a water body can assimilate without exceeding water quality standards. Once a TMDL is developed for a water body, the water body will be removed from the 303(d) list.

### 2.2.1. 303(d) Listed Streams

According to ADEM’s 2022 Final 303(d) list, there are eight (8) streams within the County’s MS4 area that have been designated as impaired. ADEM’s 2022 Final 303(d) listed streams located within the County’s MS4 area are summarized in Table 2-1 and shown in Figure 2-3.



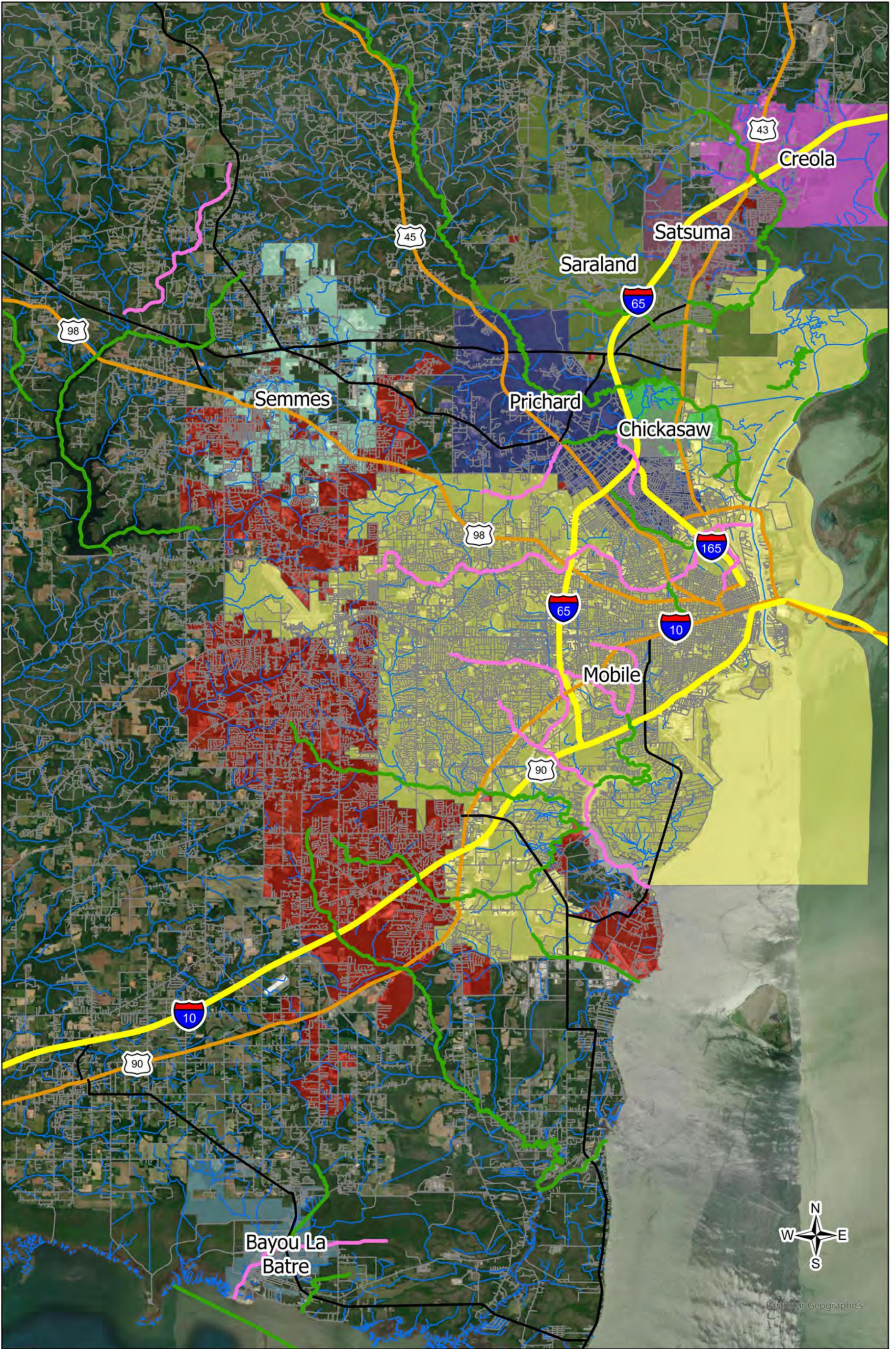
**Table 2-1 2022 Final 303(d) Listed Streams**

Waterbody		Pollutant of Concern	Sources
Name	Year Listed		
Bayou Coden	2022	Pathogens	Pasture Grazing
Carls Creek	2022	Pathogens	
Chickasaw Creek	2000	Metals (Mercury)	Atmospheric Deposition
Fowl River	2000	Metals (Mercury)	
Halls Mill Creek	2022	Metals (Mercury)	
Rabbit Creek	2022	Metals (Mercury)	
Halls Mill Creek	2012	Siltation (Habitat Alteration)	Land Development
Middle Fork Deer River	2006	Organic Enrichment	Collection System Failure Urban Runoff Storm Sewers
Deer River	2006	Organic Enrichment	

Bayou Coden and Carls Creek are impaired for pathogens with the source identified as pasture grazing. The County does not own, operate, or maintain any activities associated with pasture grazing. As a result, the County’s MS4 does not contribute to this impairment.

Chickasaw Creek, Fowl River, Halls Mill Creek are impaired for metals (mercury) with the source identified as atmospheric deposition. The County’s MS4 does not contribute to this impairment.

Middle Fork Deer River and Deer River are impaired for organic enrichment with the source identified as collection system failure, urban runoff, and storm sewers. Due to the significant number of SSOs discharging a significant volume of wastewater into impaired waterbodies and the fact that the County does not own, operate, or maintain wastewater treatment facilities or sanitary sewer collection systems, the County cannot confidently determine if it is a significant contributor to the impaired waterbodies. After the SSOs are eliminated as a contributor to the impairment, the County shall reevaluate its MS4.



Bayou La Batre	Prichard	303d Streams 2022
Chickasaw	Saraland	TMDL Streams 2022
Creola	Satsuma	MS4_Area_2020
Mobile	Semmes	



**Mobile County**  
Impaired Streams

**Figure 2-3**  
March 2023



### 2.2.2. TMDL Listed Streams

EPA has approved ADEM's Total Maximum Daily Loads (TMDLs) for selected stream segments on several streams located within the county. Pollutants of concern for each stream segment are summarized in Table 2-2 and shown in Figure 2-3.

**Table 2-2 EPA Approved TMDLs**

Waterbody Name	Pollutants of Concern	Date of Approval
Rabbit Creek	Pathogens Organic Enrichment Low Dissolved Oxygen	April 2005
Dog River		April 2005
Gum Tree Branch	Pathogens	October 2004
Bayou La Batre		September 2009
Halls Mill Creek		

Review of the TMDLs revealed that the primary source of pollution contributing to the pathogens impairment is attributed to municipal collection system failure or on-site wastewater treatment systems. Sanitary sewer overflows (SSOs) have been reported by several sanitary sewer systems in the County resulting in a significant number of SSOs discharging a significant volume of wastewater into local streams. Since the County does not own, operate, or maintain a sanitary sewer system, the County cannot confidently determine if it is a significant contributor to the impaired waterbodies. After the SSOs are eliminated as a contributor to the impairment, the County shall reevaluate its MS4.



## SECTION 3

Public Education and  
Public Involvement



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## 3. Public Education and Involvement

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### 3.1. Introduction

The MS4 NPDES permit requires the County to develop, implement, and evaluate a public education and public involvement program. Goals of the program are to:

- Educate the community about the impacts of storm water discharges into streams, rivers, lakes, and ponds;
- Identify steps that the community can take to help reduce pollutants in storm water runoff;
- Provide opportunities for public input and feedback;
- Engage the public to actively participate; and,
- Facilitate opportunities to provide public education.

As the public gains a greater understanding of the benefits of a storm water program, the County is likely to gain more support for the SWMP and increased compliance with the NPDES permit requirements. Public education and involvement provide a mechanism to help the public understand how their actions can potentially impact storm water quality. Public participation can also help reduce the amount of pollution generated and identify potential pollution causing activities and/or sources.

### 3.2. Target Audiences

Development within the County's MS4 area primarily consists of residential, commercial, and/or light industrial uses. Audiences typically associated with this type of development and land use may include:

- Home owners;
- Renters;
- Schools;
- Business owners and employees;
- Professionals;
- Developers;
- Contractors; and/or,
- Elected officials.



Educational materials may be specifically tailored to communicate a specific topic to a targeted audience.

### 3.3. Target Pollutant Sources

There are several sources of pollution that may need to be targeted in a public education program. Target pollutant sources may include:

- Illegal dumping;
- Improper disposal;
- Failing septic systems;
- Impacts of development;
- Construction site erosion;
- Litter, floatables, and debris; or,
- Improper application of fertilizers, herbicides, and pesticides.

Educational materials may be developed to describe BMPs that are effective in reducing the impacts of development on storm water runoff. Topics may include but are not limited to the following:

- General impacts of storm water runoff;
- Rainwater reuse;
- Low impact development practices; or,
- Impacts of development.

Educational materials may be specifically tailored for the targeted pollutant source of concern and/or pollution prevention practices.

### 3.4. Public Education

The County may utilize a variety of techniques to implement its public education and outreach program. Mechanisms and activities that have proven to be effective in educating the public may include:

- Local Partnerships;
- Website; or,
- Social Media.

The County shall perform a minimum of two BMPs emphasizing public education per year.



### 3.4.1. Local Partnerships

To capitalize on education materials and programs that have been developed, the County has formed partnerships with several state and local organizations that include:

- Mobile County Recycling Center;
- Mobile Bay National Estuary Program (MBNEP);
- Alabama Coastal Foundation;
- Mobile County Soil and Water Conservation District;
- Alabama Forestry Commission; and,
- Coastal Alabama Stormwater Team (CAST).

As the County's MS4 program continues to evolve, the County may seek partnerships with other agencies and organizations to facilitate the public education program.

### 3.4.2. Website

The internet provides a very accessible mechanism for making information and data available to county residents. The County's website may be expanded to incorporate storm water related topics as well as provide information regarding the County's storm water related activities. The County's website can be found at:

<http://mobilecountyal.gov>

Web pages that provide supporting information for the County's stormwater program include but are not limited to the following:

#### Stormwater Management:

- Links for resources about water quality and natural resources;
- Contact information for reporting stormwater issues;
- SWMP Plan and Annual Reports; and,
- MS4 Area Map.

#### Environmental Enforcement:

- Responsibilities;
- Ordinances and Laws;
- Education and Community Involvement; and,
- Hours of operation

#### Engineering:

- Rights-of-way Permits



#### Inspection Services

- Permits; and,
- Adopted Codes

Information from the website can be obtained from the above link. Copies of selected webpages are provided in Appendix B.

### 3.4.3. Social Media

The County is active on several social media platforms. This allows the County the opportunity to send direct messages in a timely manner to residents, businesses, property owners, and others actively following the County on these platforms. This offers a cost effective, environmentally friendly mechanism to inform the public regarding stormwater related issues. The County currently maintains the following social media platforms:

#### 3.4.3.1. Facebook

Facebook pages that may provide support to the County's stormwater program include the following:

Mobile County:

<https://www.facebook.com/MobileCountyAL?v=wall&ref=ts>

12,000 Followers

Mobile County Dept of Environmental Enforcement - MCDEE:

<https://www.facebook.com/StopLitterMobile>

13,000 Followers

Mobile County Recycling Center:

<https://www.facebook.com/mobilerecycles>

1,383 Followers

#### 3.4.3.2. Twitter

Mobile County has a Twitter account that may provide support to the County's stormwater program (<https://twitter.com/mobilecountyal>) that currently has 7,769 followers.



#### **3.4.3.3. YouTube**

Mobile County has a YouTube channel that may provide support to the County's stormwater program that currently has 274 subscribers. The YouTube channel can be accessed by the following link.

<https://www.youtube.com/channel/UCD45g-y2ULLuyg1eWPWfwJw>

### **3.5. Public Involvement**

The County may utilize a variety of mechanisms to implement its public involvement program. Mechanisms and activities that have proven to be effective in educating the public may include:

- Public Input;
- Citizen Reporting Tools;
- Recycling;
- Operation Clean Sweep;
- Love Your Community;
- Earth Day;
- Alabama Coastal Cleanup;
- Water Festival
- Recycling; or,
- Coastal Area Stormwater Team (CAST).

The County shall perform a minimum of two BMPs emphasizing public involvement per year.

#### **3.5.1. Public Input**

The County's storm water website shall be used as the primary mechanism of providing information to the public and receiving input from the public regarding the County's SWMP. The County has made available the SWMP Plan and annual report on its website. If someone would like to provide comments on the SWMP Plan, that individual can contact the County anytime of the year by submitting their comments to [stormwater@mobilecountyal.gov](mailto:stormwater@mobilecountyal.gov).

During the County's annual review of the SWMP Plan, comments received from the public shall be reviewed and the County shall determine if the comments justify any modifications to the SWMP Plan.



### 3.5.2. Citizen Reporting Tools

The County has implemented various citizen reporting tools and hotlines for the public to provide suggestions and/or report incidents that may potentially impact the MS4. A citizen can report an issue of concern by using one of the following:

Hotline: (251) 574-6511

Email: [stormwater@mobilecountyal.gov](mailto:stormwater@mobilecountyal.gov)

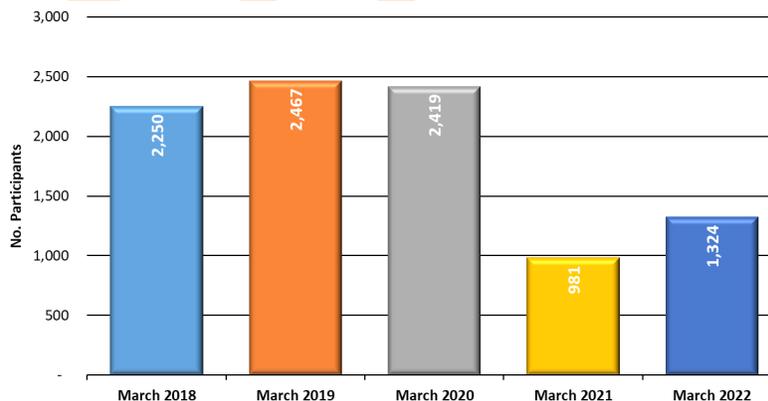
Website: Report a Problem

<https://www.mobilecountyal.gov/government/departments/environmental-enforcement/report-a-problem/>

### 3.5.3. Operation Clean Sweep

Operation Clean Sweep is a countywide program that provides a central location where resident may dispose of trash in an effort to make neighborhoods a cleaner place to live. Typically, the County may host multiple events in the spring and the fall. A summary of the number of residents participating in Operation Clean Sweep over the past five years is provided in Figure 3.1.

**Figure 3.1 Operation Clean Sweep Five Year Comparison**



Operation Clean Sweep events are well attended. The drop in participation over the past few years has been attributed to the Covid pandemic.



### **3.5.4. Love Your Community**

Love Your Community (LYC) is an on-going anti-litter program sponsored by the Mobile County Commission in partnership with Keep Mobile Beautiful, Inc., The Alabama Coastal Heritage Trust, and Clean Water Future. This program is designed to encourage citizen involvement in community clean-up and beautification.

Love Your Community supports a cleaner, healthier environment by implementing education and outreach strategies and engaging volunteers in clean-up and recycling activities throughout Mobile County. The program is designed to reduce the amount of litter that reaches local waters by engaging volunteers in self-organizing litter cleanup events and promoting the value and accomplishments of volunteers through an outreach / education campaign. Major outputs are measured by tracking the number of collection events implemented. Outputs are also measured by the number of education and outreach activities implemented, number of volunteers and the number of hours accumulated in the time-bank.

Mobile County has provided funding to hire a LYC Project Coordinator tasked with implementing and developing a comprehensive Education Outreach Program and marketing strategy geared toward increasing awareness and participation in the anti-litter program. This strategy includes activities and approaches to encourage citizen participation that promotes trash free waters. The strategy includes a marketing element to engage eligible recipients in the time-banking opportunity. The Coordinator oversees and tracks submitted team documentation and pertinent information on litter collection, volunteer hours and other allowable efforts for time-banking Love Your Community team hours associated with environmental cleanup, protection and beautification. Monthly reports are provided to document progress.

### **3.5.5. Earth Day**

Mobile County Commission may fund and participate in the annual Earth Day by promoting community events on the web page and actively engaging the community and fostering awareness through a themed event.

Mobile County may give away native trees for residents to plant on their property. The County may offer a variety of species ranging from small flowering and fruiting trees to large canopy trees. Every tree giveaway helps to cool and clean the air, absorb stormwater, increase local biodiversity, and beautify neighborhoods and public spaces.



### **3.5.6. Alabama Coastal Cleanup**

The Alabama Coastal Cleanup occurs in September each year as part of the National Estuaries Week. This is a nationwide celebration to raise awareness and increase support for our bays, estuaries, and coasts.

The Alabama Coastal Clean Up is an annual clean up event organized by ADCNR and supported by hundreds of volunteers. The coast is organized into “clean up zones” and groups work from one location and spread out to pick up trash from shorelines, waters, and adjacent roadways. Chickasabogue Park is a zone location where volunteers meet to clean up the roadways, trails, and waterways. Mobile County may provide staff support, a large, covered pavilion, kayaks, and canoes.

### **3.5.7. Water Festival**

The mission of the Water Festival is to educate students about all aspects of surface water and groundwater and other related natural resources (such as wetlands, forestry, wildlife, and much more) and to instill in them a general environmental awareness and stewardship ethic. Students and their teachers go home with an increased knowledge and awareness of the importance of our precious water resources and on becoming good environmental stewards of these resources. All 4<sup>th</sup> Grade students in County including public, private, and home-schooled students are invited to participate.

### **3.5.8. Recycling**

The Mobile County Recycling Center (MCRC) located at 7450 Hitt Road began operation in 2014 and is available to all Mobile County residents. The MCRC offers various educational events throughout the year to help educate kindergarten through high school students about recycling and protecting water quality. Materials accepted at MCRC include paper, paperboard, cardboard, plastic, glass bottles, aluminum and steel cans, plastic bags, and clothing. Information regarding MCRC can be found at its website:

<http://mobilerecycles.com>



### **3.5.9. Coastal Area Stormwater Team (CAST)**

CAST was originally developed as part of the creation of the "Clean Water Future" campaign to help inform that process. From there it has grown into a forum for municipal/county government staff working on natural resources-related issues to act as a sounding board and develop resources to aid in stormwater/natural resources management. County Environmental Services staff participates on the advisory committee via scheduled meetings coordinated by the Mobile Bay National Estuary Program. Staff members spend time and provide input in the program development. The videos linked below were developed through CAST input as well as most of the resources and content on the CWF website.

<https://www.cleanwaterfuture.com/>

- Understanding the MS4 Process
- Low Impact Development
- Retention / Detention Pond Maintenance
- Protecting Alabama's Waters

### **3.6. Program Goals and Evaluation**

The County has developed realistic, achievable, and measurable goals, and performance milestones to measure the progress in implementing a public education and involvement program. Program goals are summarized in Table 3-1.

The most basic measure to evaluate the program effectiveness is to evaluate whether the program goals are being met. At the end of the permit year, the County shall evaluate the program goals and overall effectiveness in educating the public on storm water related issues. Results of the program evaluation will be summarized in the Annual Report.



**Table 3-1 Public Education and Public Involvement – Program Goals**

Program Component	Description	Frequency	Schedule	Responsible Department
Public Education (Minimum of 2 BMPs / year)	Stormwater Web Page	Update as needed	31 March 2024	Environmental Services
	Post SWMP Plan on the Website	Annually	31 June 2024	
	Post Annual Report on the Website		31 June 2024	
	Facebook	Track	31 March 2024	
	Twitter	Track	31 March 2024	
	YouTube	Track	31 March 2024	
	Mobile County Recycling Center (MCRC)	Track	31 March 2024	
	Mobile Bay National Estuary Program (MBNEP)	Track	31 March 2024	
	Alabama Coastal Foundation	Track	31 March 2024	
	Coastal Alabama Stormwater Team (CAST)	Track	31 March 2024	
Public Involvement (Minimum of 2 BMPs / year)	Public Input for SWMP Plan	Continuously	31 March 2024	Environmental Services
	Citizen Reporting Tools	Track	31 March 2024	
	Operation Clean Sweep	Track	31 March 2024	
	Love Your Community	Track	31 March 2024	
	Earth Day	Track	31 March 2024	
	Alabama Coastal Cleanup	Track	31 March 2024	
	Water Festival	1 / year	31 March 2024	
	Recycling	Track	31 March 2024	
	Coastal Area Stormwater Team (CAST)	Track	31 March 2024	
Program Evaluation	Evaluate Program Effectiveness	1 / year	31 March 2024	Environmental Services



## SECTION 4

Illicit Discharge Detection  
and Elimination (IDDE)



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## 4. Illicit Discharge Detection and Elimination

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### 4.1. Introduction

This Illicit Discharge Detection and Elimination (IDDE) Program has been developed using the following guidance materials.

- NPDES Permit ALR040043;
- 40 CFR 122.26; and,
- Illicit Discharge Detection and Elimination, A Guidance Manual for Program Development and Technical Assessments, October 2004.

These documents are incorporated into the SWMP Plan by reference.

### 4.2. Allowable and Occasional Incidental Discharges

In accordance with Part I, Section B.2 of the NPDES permit and 40 CFR 122.26(d)(2)(iv)(B)(1), the following non-storm water sources are authorized provided that they do not cause or contribute to a violation of water quality standards, and they have been determined not to be substantial contributors of pollutants. The County has determined that the following non-storm water discharges are not substantial contributors of pollutants to the MS4:

1. Water line flushing;
2. Landscape irrigation water;
3. Diverted stream flows;
4. Uncontaminated ground water infiltration;
5. Uncontaminated pumped ground water;
6. Discharges from potable water sources;
7. Foundation drains;
8. Air conditioning condensate;
9. Irrigation water (not consisting of treated or untreated wastewater);
10. Rising ground waters;
11. Springs;
12. Water from crawl space pumps;



13. Footing drains;
14. Lawn watering runoff;
15. Individual residential car washing, to include charitable carwashes;
16. Residual street wash water;
17. Discharge or flows from firefighting activities (including fire hydrant flushing);
18. Flows from riparian habitats and wetlands;
19. Dechlorinated swimming pool discharges; and,
20. Discharges authorized by and in compliance with a separate NPDES permit.

### **4.3. Preventing Illicit Discharges**

The IDDE Program identifies key behaviors of the public, facilities, and municipal operations that produce intermittent and/or transitory discharges. These key behaviors are targeted to improve pollution prevention practices and prevent or reduce the risk of discharge. The County has developed a wide variety of education and enforcement tools to promote pollution prevention practices.

### **4.4. Public Education**

Public education activities are described in Section 3 of the SWMP Plan.

### **4.5. Public Reporting**

The County has implemented a hotline for the public to report suspect illicit discharges and/or to report incidents that may potentially impact the County's MS4. A citizen can report an issue of concern by using one of the following:

Hotline: (251) 574-6511

Email: [stormwater@mobilecountyal.gov](mailto:stormwater@mobilecountyal.gov)

Website: Report a Problem

<https://www.mobilecountyal.gov/government/departments/environmental-enforcement/report-a-problem/>



## 4.6. Searching for Illicit Discharges

The County has implemented a comprehensive program to detect and eliminate illicit discharges. There are two categories of pollutants that will be addressed in different ways:

1. The first category is pollutants introduced into the MS4 from individuals in a one-time distinct episode at a discrete point of entry. Examples of these are dumping of yard waste, motor oil, antifreeze, or trash into a creek or storm drain. These types of pollutants, when discovered in the MS4 or local streams, cannot be effectively investigated as to the source (i.e., the individual causing the pollution). Also, they are not normally discovered using an inspection program of monitoring fixed stations with scheduled work-day inspections. One of the best means of discovery will be through input from citizens, county crews, Police and Fire departments, businesses, and area agency field crews. Prevention of future isolated pollution episodes will rely upon implementation of the Public Education and Involvement Program.
2. The second category is pollutants from sources that have a chronic or frequently repeating discharge that can be traced through stream channels and the MS4 system using visual inspections, chemical field test kits, and/or laboratory monitoring. Pollutants from these sources will be dispersed downstream as a detectable odor, visual color, increased turbidity, excessive algae growth, or changes in water chemistry (e.g. pH or conductivity) when compared to uncontaminated water in the stream or MS4. These chronic pollutants are amenable to “source tracking” inspections, and the sources are more likely to be found and mitigated.

Searching for illicit discharge problems consists of detective work and involves field screening of subwatersheds to locate outfalls and identify suspect illicit discharges. The primary field screening tool that will be used is the Outfall Reconnaissance Inventory (ORI). This recommended method is effective for finding illicit discharge problems and developing an outfall inventory of the MS4. If suspect discharges are encountered during the field screening, the ORI may be supplemented with indicator monitoring methods to test suspect discharges.

### 4.6.1. Field Activities

Field activities associated with the outfall reconnaissance inventory shall be performed when there has been a prolonged dry period with a minimum of 72 hours from the previous measurable (greater than 0.10-inch rainfall) storm event.

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#### **4.6.2. Outfall Inventory Schedule**

With the reissuance of NPDES Permit ALR040043 and the release of the 2020 Urbanized Area, the County has identified where county roads intersect with waters of the State. The County has developed a schedule to evaluate each location within the County's MS4 Area by March 2028 and to identify regulated outfalls as described in the SWMP Plan. Locations to be evaluated each permit year are shown in Figure 4-1. After all locations have been screened; the County shall evaluate the screening data for regulated outfalls and may identify priority areas for future evaluation.

At a minimum, the County shall screen fifteen percent (15%) of the locations once per year with all (100 percent) of the locations screened at least once per five years. Due to the relatively small number of regulated outfalls located within the County's MS4, the County may complete the screening activities in less than a five-year period. If all known regulated outfalls are screened in less than a five-year period, the County may not perform any subsequent screening activities until the next five-year period.

#### **4.6.3. Priority Areas**

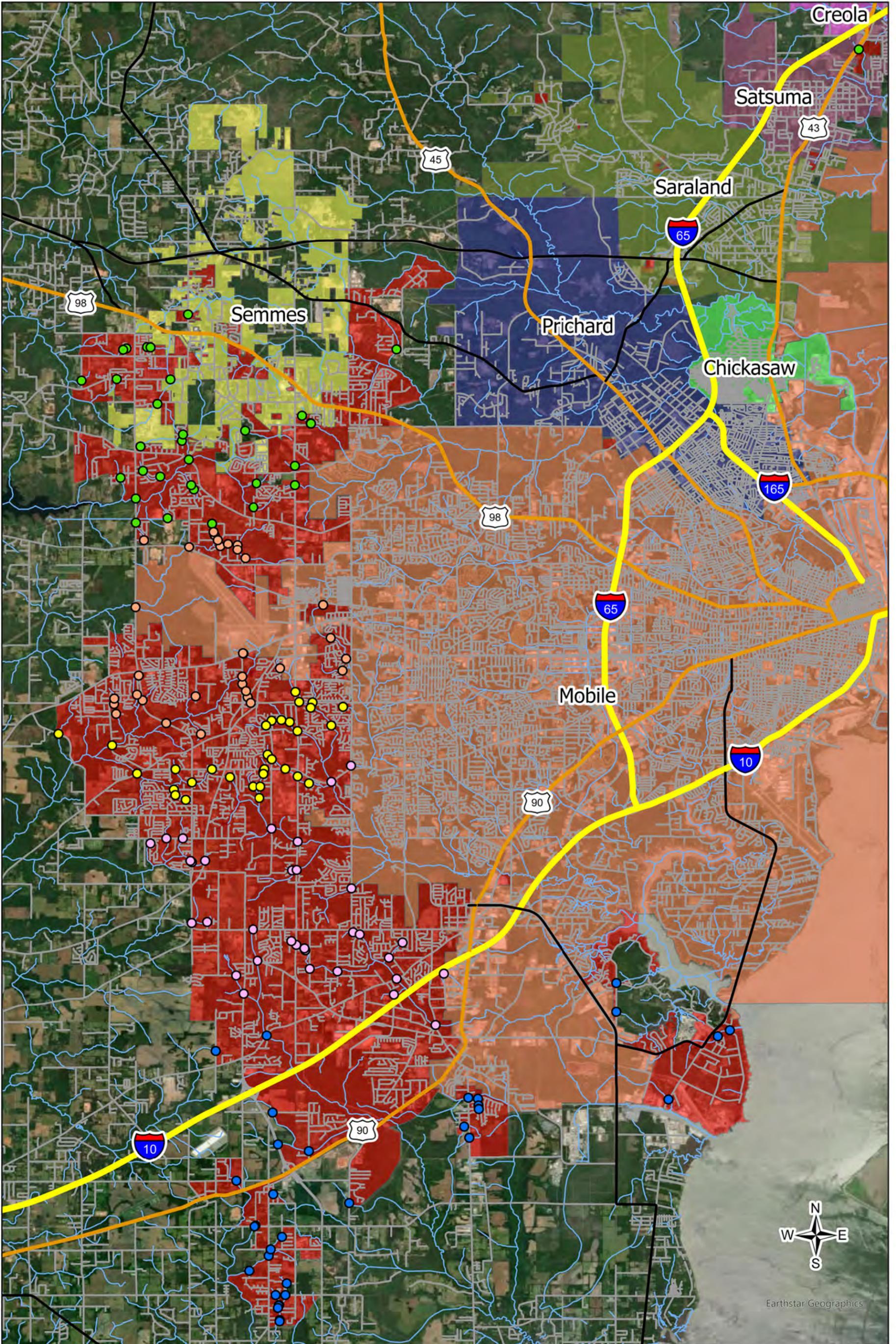
Based on previous outfall screening activities, the County has not identified any priority areas that require more frequent screening.

### **4.7. Outfall Reconnaissance Inventory (ORI)**

The ORI is designed to locate and record basic characteristics of each regulated outfall. During the inventory process, each regulated outfall shall be screened for the presence of illicit discharge(s). The County's ORI methodology and procedures have been developed in accordance with Chapter 11 of the Illicit Discharge Detection and Elimination guidance manual.

#### **4.7.1. Field Sheets**

The County may utilize the ORI / Sample Collection Field Sheet provided with the IDDE Guidance Manual to collect and document each outfall. A copy of the ORI / Sample Collection Field Sheet is provided in Appendix C.



MS4 Area 2020	2023	2026
	2024	2027
	2025	



**Mobile County**  
Potential Outfall Locations

**Figure 4.1**  
March 2023



### 4.7.2. Screening Data

Information and data that may be collected for each outfall shall include:

#### Section 1 – Background Data

- Coordinates
- Photograph

#### Section 2 – Outfall Description

- Location
- Material
- Shape
- Dimensions
- Submerged

#### Section 3 – Quantitative Characterization

- Parameter
- Result
- Unit
- Equipment

#### Section 4 – Physical Indicators for flowing outfalls only

- Indicator
- Description
- Relative Severity Index

#### Section 5 – Physical Indicators for both flow and non-flowing outfalls.

- Indicator
- Description

Chapter 11 of the ORI of the IDDE Guidance Manual provides direction in completing the ORI / Sample Collection Field Sheet information.

### 4.7.3. Regulated Outfall

The County defines a Regulated Outfall as a point where the County's MS4 discharges to a water of the State from:

- A pipe (or closed conveyance) system with a cross sectional area equal to or greater than 1.77 square feet (e.g., if a single circular pipe system, an inside diameter of 18-inches or greater);
- A single conveyance other than a pipe, such as an open channel ditch, which is associated with a drainage area of more than 25 acres;



## 4.8. Suspect Illicit Discharges

If a suspect illicit discharge is encountered during the ORI, field personnel may take the following steps to identify and locate a suspect illicit discharge.

- Conduct field screening of the suspect illicit discharge;
- Try to identify the source of the suspect illicit discharge; and/or,
- Collect a sample of the suspect illicit discharge.

When episodic incidental pollution is reported to the County (e.g., motor oil dumped into a storm drain), the County shall record the date, location, information source, and description of the event. If necessary, field personnel shall investigate to determine if the site should be cleaned (e.g., removal of yard waste, containment of oil, etc.). After inspection and/or cleanup, the County shall keep a record of all actions taken regarding the incident.

### 4.8.1. Locating Illicit Discharges

If a suspect illicit discharge is identified during the ORI, field personnel shall try to locate the source of the illicit discharge before proceeding to the next outfall. Field personnel may employ the following techniques to identify the source of the suspect illicit discharge.

- Storm Sewer System Evaluation – Field personnel may attempt to follow the suspect illicit discharge up the storm sewer system to identify its source.
- Drainage Area Evaluation – Field personnel may conduct a “windshield” survey of the drainage area to identify its source.
- If the source of an illicit discharge is located, field personnel shall report the location and source of the illicit discharge to the appropriate regulatory authority.

### 4.8.2. Sample Collection

If a discharge from an outfall exhibits a physical characteristic of an illicit discharge and/or the source of the suspect illicit discharge cannot be easily identified, field personnel may collect a grab sample of the discharge. The sample shall be shipped to an independent laboratory and analyzed for the parameters listed in Table 4-1.



**Table 4-1 Sample Parameters**

- Ammonia
- Chlorine
- Surfactants
- Turbidity
- Conductivity
- Detergents
- E. Coli
- Total Coliform
- Fluoride
- Hardness
- Potassium

The County shall use the sample collection protocol provided in Appendix G of the Illicit Discharge Detection and Elimination Guidance Manual. Analytical methods for samples submitted to an independent laboratory shall be in accordance with 40 CFR 136.

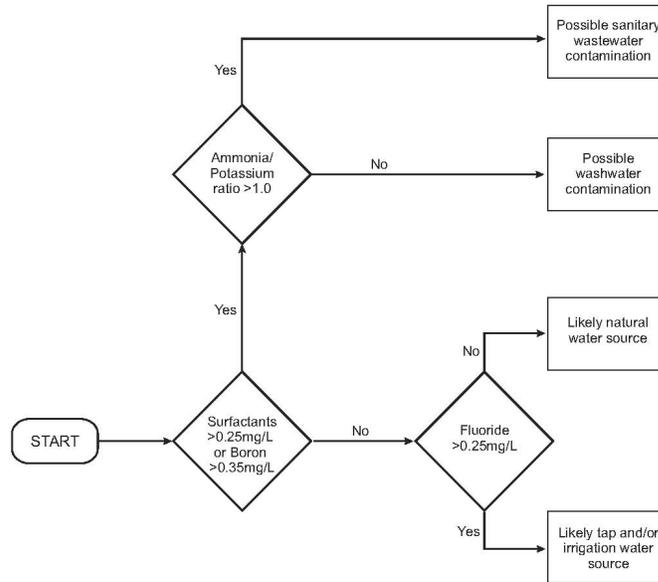
#### **4.8.3. Evaluation of Results**

The Illicit Discharge Detection and Elimination Guidance Manual recommends the use of the Flow Chart Method for identifying the type of illicit discharge. The Flow Chart Method is recommended because it is a relatively simple technique that analyzes four or five indicator parameters that are safe, reliable, and inexpensive to measure. The basic decision points involved in the Flow Chart Method for a residential area are shown in Figure 4-2.

If a suspect illicit discharge is discovered within the County's MS4 area, the County shall conduct a site investigation to evaluate the suspect illicit discharge. Upon confirmation of an illicit discharge, the County shall provide written notification to the property owner(s) that an illicit discharge is present, and that the property owner(s) are responsible for eliminating the source of the illicit discharge. If the illicit discharge is not corrected, the County shall notify the appropriate regulatory authority for further enforcement action.



**Figure 4-2 Flow Chart to Identify Illicit Discharges in Residential Areas**



### 4.9. Spill Response

The County’s Emergency Management Agency (EMA) is responsible for responding to any type of spill that may occur within the County’s MS4 Area. The County may evaluate the impacts of the spill on the MS4 and ensure appropriate corrective measures are taken to abate the spill. Follow up inspections of the affected area may be performed as needed.

### 4.10. Sanitary Sewer Systems

Residents located within the County’s MS4 area utilize either a sanitary sewer system or an on-site sewage disposal systems. There are various sanitary sewer utilities located within the County. If the County observes an SSO or other problems with a sanitary sewer system, the County shall report the issue to the appropriate sanitary sewer utility.

The Alabama Department of Public Health has the regulatory authority for the design, permitting, construction, and maintenance of individual on-site sewage disposal systems. If the County observes any problems with an on-site sewage disposal system, the County shall report the problem to the County Health Department.



#### **4.11. Enforcement**

The County has limited authority provided by the Alabama Limited Self Governance Act. If the County cannot resolve an issue, the County shall report the issue to the appropriate regulatory authority.

#### **4.12. Training**

Staff selected to perform the ORI may receive the following training.

- ORI field procedures;
- Water quality monitoring procedures; and,
- Illicit discharge tracking procedures.

Any new staff incorporated into the ORI shall receive the training described above and refresher training as needed.

The County has trained Public Works, Road and Bridge, and Environmental Enforcement department employees in general awareness to identify potential non-stormwater discharges into the County's storm sewer system. Types of non-stormwater discharges that may be observed include but are not limited to sanitary sewer overflow, oily, soapy, discolored water, construction runoff, chemicals, trash, paint, etc.

As part of the training and IDDE Card was provided for each county vehicle. The IDDE Card provides direction to County employees on how to report a suspect non stormwater discharge. A copy of the IDDE Card is provided in Appendix C.

#### **4.13. Standard Operating Procedures**

The County may develop Standard Operating Procedures (SOPs) for the various activities required for implementing the Illicit Discharge Detection and Elimination Program. SOPs may include but are not limited to the following:

- Sampling equipment use, maintenance and storage;
- ORI; or,
- Illicit discharge evaluation.

As SOPs are developed, they shall be included in Appendix C.



#### 4.14. Program Goals and Evaluation

The County has developed realistic, achievable, and measurable goals, and performance milestones to measure the progress in implementing the illicit discharge detection and elimination program. Program goals are summarized in Table 4-2.

The most basic measure to evaluate the program effectiveness is to evaluate whether the program goals are being met. At the end of the permit year, the County shall evaluate the program goals and overall effectiveness of illicit discharge detection and elimination program. The results of the program evaluation will be summarized in the Annual Report.



**Table 4-1 Illicit Discharge Detection and Elimination – Program Goals**

Program Component	Description	Frequency	Schedule	Responsible Department
Legal Authority	Illicit Discharge Policy	Update as needed	31 March 2024	Environmental Services
Outfall Inventory	Outfall Screening Schedule	Update as needed	31 March 2024	Environmental Services
	Outfall Screening Inspection Form	Update as needed	31 March 2024	
	Outfall Map	Update Annually	31 March 2024	
	Outfall Screening	1 / 5 years	31 March 2024	
	Evaluate priority areas for additional screening	As needed	31 March 2024	
	Training	As needed	31 March 2024	
Illicit Discharges	Complaint Tracking System	Update as needed	31 March 2024	Environmental Services
	Illicit Discharge Inspection Form	Update as needed	31 March 2024	
	Illicit discharge investigations	Track	31 March 2024	
Standard Operating Procedures	Outfall Reconnaissance Inventory	Update as needed	31 March 2024	Environmental Services
Program Evaluation	Evaluate Program Effectiveness	Annually	31 March 2024	



## SECTION 5

Construction Site Runoff



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## 5. Construction Site Runoff

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### 5.1. Introduction

The County has developed and continuously implemented a Construction Site Runoff Program to monitor and manage pollutants in storm water discharges to the MS4 from the following land disturbing activities.

- Land disturbance equal to or greater than one (1) acre; and,
- Land disturbance involving less than one (1) acre that is part of a larger common plan of development.

This Construction Site Runoff Program has been developed using the following guidance materials.

- Alabama Handbook for Erosion Control, Sediment Control, and Storm Water Management on Construction Sites and Urban Areas, Alabama Soil and Water Conservation Committee, March 2009; and,
- Developing Your Storm Water Pollution Prevention Plan, A Guide for Construction Sites, Environmental Protection Agency, EPA 833-R-06-004, May 2007.

These documents are incorporated into the Construction Site Runoff Program by reference.

### 5.2. Requirements and Control Measures

As provided by 40 CFR Part 122.35(b), the County may rely on ADEM for the setting of standards for appropriate erosion controls and sediment controls for qualifying construction sites and for enforcement of such controls. The County's Construction Site Runoff Program will require owners and/or operators of construction sites to select, design, install, implement, inspect, and maintain effective Best Management Practices (BMPs) to minimize the discharge of pollutants into the MS4 to the maximum extent practicable (MEP).

#### 5.2.1. Erosion and Sediment Controls

The owner and/or operator shall select, design, install, implement, inspect, and maintain BMPs appropriate to specific site conditions to, at a minimum:



1. Control storm water discharges to minimize erosion at outlets and to minimize downstream channel and stream bank erosion;
2. Minimize the disturbance of steep slopes;
3. Minimize sediment discharges from the site;
4. Minimize the generation of dust and off-site tracking of sediment from vehicles;
5. Stabilize all construction entrances and exits;
6. Provide and maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, unless infeasible; and,
7. Implement measures or requirements to achieve the pollutant reductions consistent with a Total Maximum Daily Load (TMDL) finalized or approved by EPA.

#### **5.2.2. Soil Stabilization**

Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 13 calendar days.

#### **5.2.3. Dewatering**

Discharges from dewatering activities, including discharges from dewatering of trenches and excavations are prohibited unless managed by appropriate BMPs.

#### **5.2.4. Pollution Prevention Measures**

The owner and/or operator shall select, design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented, and maintained to:

1. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
2. Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides,



- detergents, sanitary waste, and other materials present on the site to precipitation and storm water runoff; and,
3. Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.

### **5.2.5. Prohibited Discharges**

The following discharges are prohibited:

1. Wastewater from washout of concrete, unless managed by an appropriate BMP;
2. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials;
3. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and,
4. Soaps or solvents used in vehicle and equipment washing.

### **5.2.6. Surface Outlets**

When discharging from basins and impoundments the owner and/or operator shall utilize outlet structures that withdraw water from the surface, unless infeasible.

## **5.3. Legal Authority**

The County has limited legal authority provided by the Alabama Limited Self Governance Act. This Act limits County commissions to only abate public nuisances related to the following.

- Weeds;
- Animals and animal nuisances;
- Litter and rubbish;
- Junkyards; and,
- Noise, unsanitary sewage, or pollution creating a public nuisance.

The County does not have the authority to adopt ordinances pertaining specifically to Construction Site Runoff Control.

### **5.3.1. Subdivision Regulations**

On 13 December 2004, the County Commission adopted Subdivision Regulations. These regulations established procedures and standards for the design and



development of proposed subdivision or additions to existing subdivisions within the subdivision jurisdiction of the County.

A copy of the Subdivision Regulations is provided in Appendix D.

### **5.3.2. Design and Construction Guidelines**

The County has developed the following documents to provide requirements for the design and construction of major subdivisions and commercial sites:

- Construction Specifications and Engineering Requirements for Subdivisions; and,
- Commercial Site Plan Requirements.

Select components include:

- Requires ADEM NPDES permit for qualifying developments;
- Requires a signed and sealed Certificate of Professional Engineering Design for Acceptance of a Subdivision in Mobile County;
- Prior to any land disturbing activity, a “Permit to Develop” shall be obtained; and,
- Requires that the contractor shall adhere to The Alabama Handbook for Erosion Control, Sediment Control, and Stormwater Management on Construction Sites and Urban Areas.

A copy of the documents is provided in Appendix D.

## **5.4. Permitting**

There are three types of construction activity regulated by the County:

- County Construction Projects;
- Subdivision Construction; and,
- Building Construction.

Each type of construction activity is handled differently and described in the following sections.

### **5.4.1. County Construction Projects**

County construction projects consist of the construction of County roads, bridges, and storm sewers. The County shall retain the services of a design professional



to prepare the construction plans and to oversee the project during construction. The permitting process for a County construction project replicates the Alabama Department of Transportation (ALDOT) design and construction process.

#### **5.4.2. Subdivision Construction**

Before the commencement of land disturbing activity, the owner and/or operator of the construction site is required to submit an application and construction best management practices plan (CBMPP) certified by a Qualified Credentialed Professional (QCP) for administrative review. Review of the CBMPP is performed by engineers knowledgeable in the many facets of design, storm water management, erosion and sediment control, and construction.

Following approval of the of the administrative review, the County shall issue a Permit to Develop for the proposed development. A Copy of the Permit to Develop is provided in Appendix D.

#### **5.4.3. Building Construction**

Construction within the unincorporated areas of the county require a building permit for new construction, additions, renovations, and/or repairs that. Before the commencement of construction, the owner and/or operator is required to submit a permit application. Upon approval of the permit application, the County shall issue a Permit to Develop.

### **5.5. Construction Site Inventory**

Building Inspections is responsible for managing the construction of structures and uses Community Core Solutions to support its activities. This software allows Building Inspections to efficiently manage permit applications, permit information, plan reviews, construction progress, and site inspections. Since the database is managed daily, Building Inspections can continuously maintain an updated inventory of active construction sites.

Engineering is responsible for managing construction of the County's roadway projects and utilizes an Excel spreadsheet to track the progression of new developments.

Within 365 days of the effective date of the County's new MS4 NPDES Permit, the County shall develop and maintain an inventory of qualifying construction sites.



## 5.6. Training

County staff responsible for inspecting construction sites shall maintain a Qualified Credentialed Inspector (QCI) certification. Currently, the County has 50 QCI certified staff from the Engineering, Public Works, and Inspection Services Departments.

Staff shall receive annual refresher training. Copies of the current QCI training certificates shall be maintained in Appendix D.

## 5.7. Inspections

After the CBMP Plan has been approved, a copy of the approved CBMP Plan shall be provided to the Developer and the project shall be assigned to one of the County's inspectors. The inspector shall review the CBMP Plan, design plans, and all applicable project documents. All inspections and activities associated with the project shall be tracked by the permit number.

### 5.7.1. County Construction Projects

The County retains the services of a design professional to manage County construction projects. The design professional is responsible for performing all erosion and sediment control inspections as required by the projects ADEM Construction General Permit.

### 5.7.2. Subdivision Construction

The developer is responsible for retaining the services of a design professional to perform all erosion and sediment control inspections as required by the projects ADEM Construction General Permit.

### 5.7.3. Building Construction

The County performs an initial inspection after BMPs have been installed and routine inspections throughout the construction process. The County shall inspect priority construction sites at a minimum frequency of monthly. All other construction sites shall be inspected at a minimum frequency of once every three months.

If deficiencies are noted during the inspection, the inspector shall discuss the nature of the deficiencies with the Developer. If all deficiencies have been corrected, the inspector shall approve the inspection and allow the Developer to



proceed with construction of the project. The inspector shall document the results of the inspection.

## **5.8. Enforcement**

Since the County has limited legal authority to enforce compliance of its Construction Site Stormwater Runoff Control Program and in accordance with 40 CFR Part 122.35(b), the County can rely upon ADEM to provide enforcement assistance. If a construction site continues to have compliance issues after a second verbal warning, the County may notify ADEM of the non-compliant construction site. A flow chart showing the escalating scale of enforcement action is provided in Figure 5-1 and further described in the sections below.

### **5.8.1. Verbal Warning**

If deficiencies are noted during an inspection, the inspector shall discuss the nature of the deficiencies with the Developer. The following actions shall be taken to abate any violations.

- The Developer shall be given a verbal warning and 48 hours to correct all deficiencies noted by the building inspector.
- The inspector shall perform a re-inspection within 48 hours.
- If the deficiencies are not corrected within 48 hours, the inspector may issue a second verbal warning with 48 hours to correct all deficiencies noted or issue a stop work order.
- The inspector shall perform a re-inspection within 48 hours.
- If the deficiencies are not corrected within 48 hours of the second verbal warning, the inspector shall determine if the enforcement action should be escalated to a stop work order.

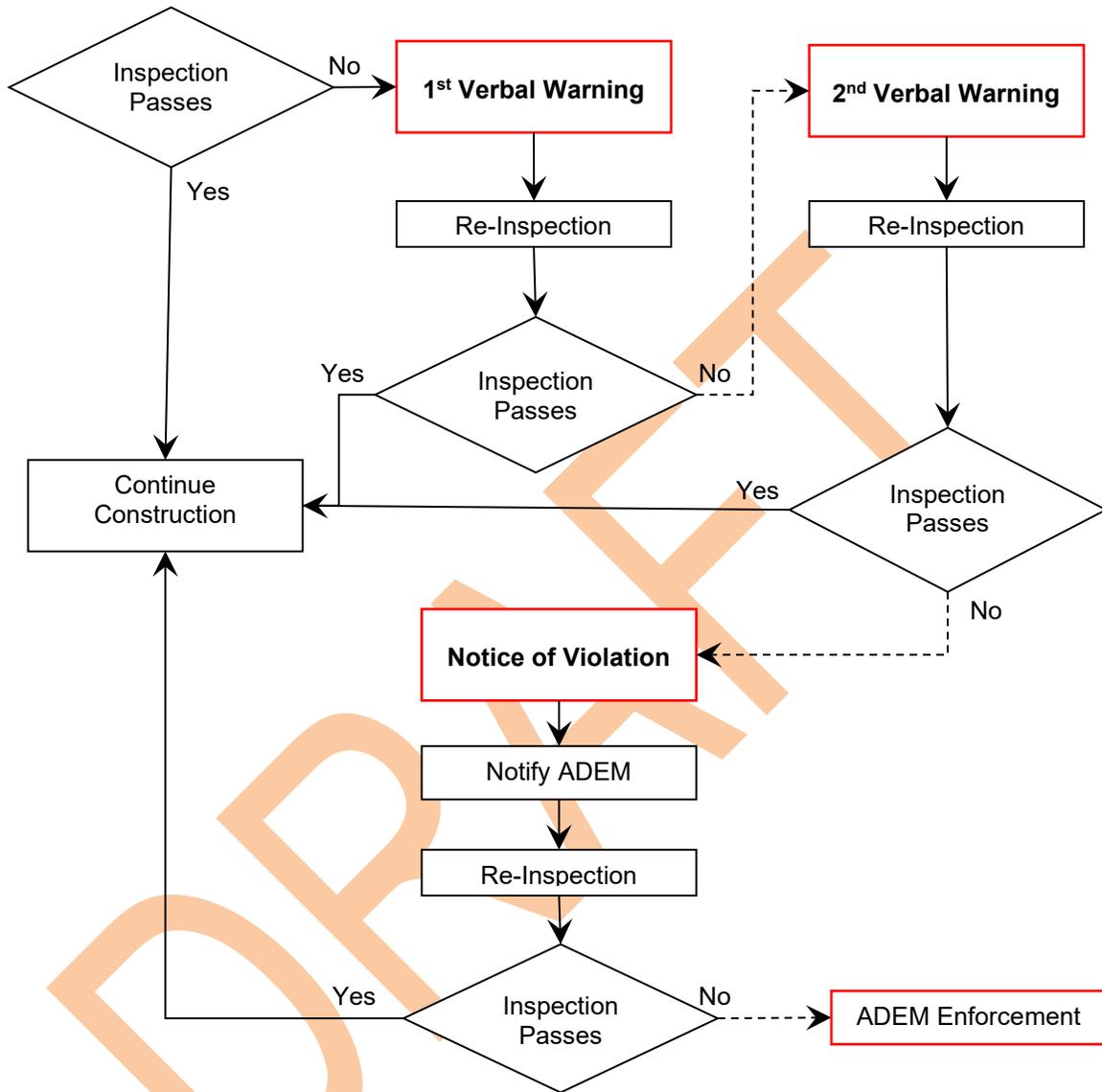
### **5.8.2. Stop Work Order**

If the inspector determines that the deficiencies continue uncorrected, the inspector may issue a written Stop Work Order. At a minimum, the Notice of Violation shall contain the following:

- Name and address of alleged violator;
- Location or address of the site where the violation occurred;
- Nature of the violation;
- Description of the remedial actions required to abate the violation; and,
- Time frame for abating the violation.



Figure 5-1 Enforcement Action Flow Chart



If the violation is not abated within the specified time frame, the County may utilize its resources to abate the violation. Upon issuance of a written Stop Work Order, the inspector may notify ADEM regarding status of the site.

If the violation is not corrected within the time frame specified in the Stop Work Order, the inspector shall notify ADEM regarding status of the site. Due to the County’s limited home rule, any future enforcement actions shall be performed by ADEM.



## 5.9. Public Reporting

The County has implemented various citizen reporting tools and hotlines for the public to provide suggestions and/or report incidents that may potentially impact the MS4. A citizen can report an issue of concern by using one of the following:

Hotline: (251) 574-6511

Email: [stormwater@mobilecountyal.gov](mailto:stormwater@mobilecountyal.gov)

Website: Report a Problem

<https://www.mobilecountyal.gov/government/departments/environmental-enforcement/report-a-problem/>

## 5.10. Non-Permitted Construction Activities

If County personnel encounter qualifying construction activities that have not obtained an ADEM permit for construction, the County shall notify ADEM. At a minimum, the County shall provide the following information:

- Specific location of the construction project;
- Name and contact information of the owner or operator, if available; and,
- Summary of concerns or permit status.

The County may utilize the Complaints link on ADEM's website to provide this notification.

## 5.11. Program Goals and Evaluation

The County has developed realistic, achievable, and measurable goals, and performance milestones to measure the progress in implementing a construction site runoff program. Program goals are summarized in Table 6-1.

The most basic measure to evaluate the program effectiveness is to evaluate whether the program goals are being met. At the end of the permit year, the County shall evaluate the program goals and overall effectiveness in educating the public on storm water related issues. The results of the program evaluation will be summarized in the Annual Report.



**Table 5-1 Construction Site Runoff – Program Goals**

Program Component	Description	Frequency	Schedule	Responsible Department
Legal Authority	Subdivision Regulations	Update as needed	31 March 2024	Engineering
	Design and Construction Guidelines	Update as needed	31 March 2024	
Permitting and Plan Review	County Projects	Track	31 March 2024	Engineering
	Subdivision Construction	Track	31 March 2024	Inspection Services
	Building Construction	Track	31 March 2024	
Inventory	County Projects	Track	31 March 2024	Engineering
	Subdivision Construction	Track	31 March 2024	Inspection Services
	Building Construction	Track	31 March 2024	
Inspections	County Projects	Track	31 March 2024	Engineering
	Subdivision Construction	Track	31 March 2024	Inspection Services
	Building Construction	Track	31 March 2024	
Enforcement	County Projects	Track	31 March 2024	Engineering
	Subdivision Construction	Track	31 March 2024	Inspection Services
	Building Construction	Track	31 March 2024	
Training	QCI Training	1 / year	31 March 2024	Engineering Inspection Services
Public Reporting	Complaints	Track	31 March 2024	Environmental Services
Non-Permitted Sites	ADEM Notifications	Track	31 March 2024	Engineering Inspection Services
Program Evaluation	Evaluate Program Effectiveness	1 / year	31 March 2024	Engineering Inspection Services



## SECTION 6

Post Construction  
Storm Water Management



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## 6. Post-Construction Storm Water Management

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### 6.1. Introduction

The NPDES permit requires the County to develop, implement and enforce a program to address storm water discharges from qualifying new development and redevelopment projects that disturb greater than one acre, and projects less than one acre that are part of a larger common plan of development.

Post-construction runoff generally has two types of impacts. First, developed areas may increase the type and quantity of pollutants in storm water runoff. When storm water flows over areas altered by development it has a potential to pick up a variety of pollutants including but not limited to trash, debris, sediment, oil, grease, pesticides, heavy metals and/or nutrients, and carry these pollutants to the streams and lakes. Second, development increases the impervious surfaces of an area resulting in a quantity increase of storm water runoff. Increased impervious surfaces like buildings and parking lots interrupt the natural cycle of gradual percolation of storm water through the vegetation and soil. Instead, storm water is collected on the impervious surface and conveyed to drainage systems where increase volumes of storm water runoff enter the stream quickly. As a result, stream banks are more susceptible to scouring and the downstream areas have a higher potential of flooding.

### 6.2. Program Components

Post-construction storm water management involves the implementation of structural and/or non-structural BMPs to provide permanent storm water management over the life of a property's use. It is important to recognize that many BMPs are climate dependent and not all BMPs are suitable for every site. The County shall evaluate and identify BMPs that are suitable for this area and are within the County's regulatory control.

#### 6.2.1. Low Impact Development

Where feasible, the County may encourage landowners and developers to incorporate the use of low impact development (LID) into development plans. The County has reviewed and adopted the latest version of the *Low Impact Development (LID) Handbook for the State of Alabama*.



### 6.2.2. Non-Structural BMPs

Due to the County's limited regulatory authority, the County cannot develop a zoning plan or zoning map. The County's subdivision regulations provide a mechanism to implement a post-construction storm water management program. Non-structural BMPs may include but not limited to the following.

- Design standards;
- Plan review and approval procedures;
- Post construction BMP evaluation and inspection procedures; and,
- BMP maintenance requirements.

The subdivision regulations already contain a provision to address the quantity of post developed storm water runoff.

### 6.2.3. Structural BMPs

There are a variety of structural BMPs capable of not only managing the volume and velocity of storm water runoff, but also provides very effective treatment of storm water runoff. Structural BMPs may include but are not limited to the following.

- Storm water retention / detention basins;
- Infiltration basins / trenches;
- Proprietary structural devices;
- Pervious pavement;
- Grass swales;
- Filter strips;
- Constructed wetlands; and,
- Rain gardens.

As the County's post construction storm water management program develops, the County shall evaluate and identify the most appropriate BMPs. A design rainfall event with an intensity up to a 2-year, 24-hour storm event shall be the basis for the design and implementation of post-construction water quality BMPs.

### 6.2.1. Post-Construction BMP Plan Review

The County already has a permitting and plan review process and has incorporated the post-construction BMP plan review into the existing process.



### **6.2.1. As-built Certification**

The County has updated the Engineered Site Plan Requirements to incorporate post-construction certification requirements. Upon completion of the site work and to demonstrate that stormwater measures have been installed in accordance with the design, the County requires the project Owner to submit a Post-Construction Certification of an Engineered Site Plan.

#### **6.2.1. Annual Inspection**

Since the County has limited legal authority to implement and/or enforce some requirements of the NPDES permit, the County shall evaluate mechanisms that may be utilized to address the annual inspection requirements of the NPDES permit.

#### **6.2.2. Operation and Maintenance**

The County's post-construction requirements require the project Owner to submit a plan for maintenance of any drainage easements and stormwater detention facilities. The Owner is required to provide a signed acknowledgement as to who will own and maintain drainage easements and stormwater detention facilities and that perpetual maintenance responsibilities will run with the land. Signed acknowledgements and/or articles of incorporation shall be recorded with the Judge of Probate of Mobile County.

### **6.3. Program Goals and Evaluation**

The County has developed realistic, achievable, and measurable goals, and performance milestones to measure the progress in implementing a post construction storm water management program. Program goals are summarized in Table 6-1.

The most basic measure to evaluate the program effectiveness is to evaluate whether the program goals are being met. At the end of the permit year, the County shall evaluate the program goals and overall effectiveness of post construction storm water controls to improve storm water quality. The results of the program evaluation will be summarized in the Annual Report.



**Table 6-1 Post Construction Storm Water Management – Program Goals**

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## SECTION 7

Pollution Prevention and  
Good Housekeeping



## 7. Pollution Prevention and Good Housekeeping

### 7.1. Introduction

Pollution prevention / good housekeeping for municipal operations is a control measure designed to emphasize the operation and maintenance of the MS4 and proper training of county employees. Performing municipal activities in a careful and proper manner prevents and/or reduces the potential of polluting storm water runoff.

### 7.2. Program Components

The pollution prevention / good housekeeping program is a key element to help the MS4 to reduce potential pollutants from entering storm water runoff. This control measure requires the County to evaluate existing facilities and operations to identify areas of improvement that will help ensure a reduction in the amount and type of potential pollutants.

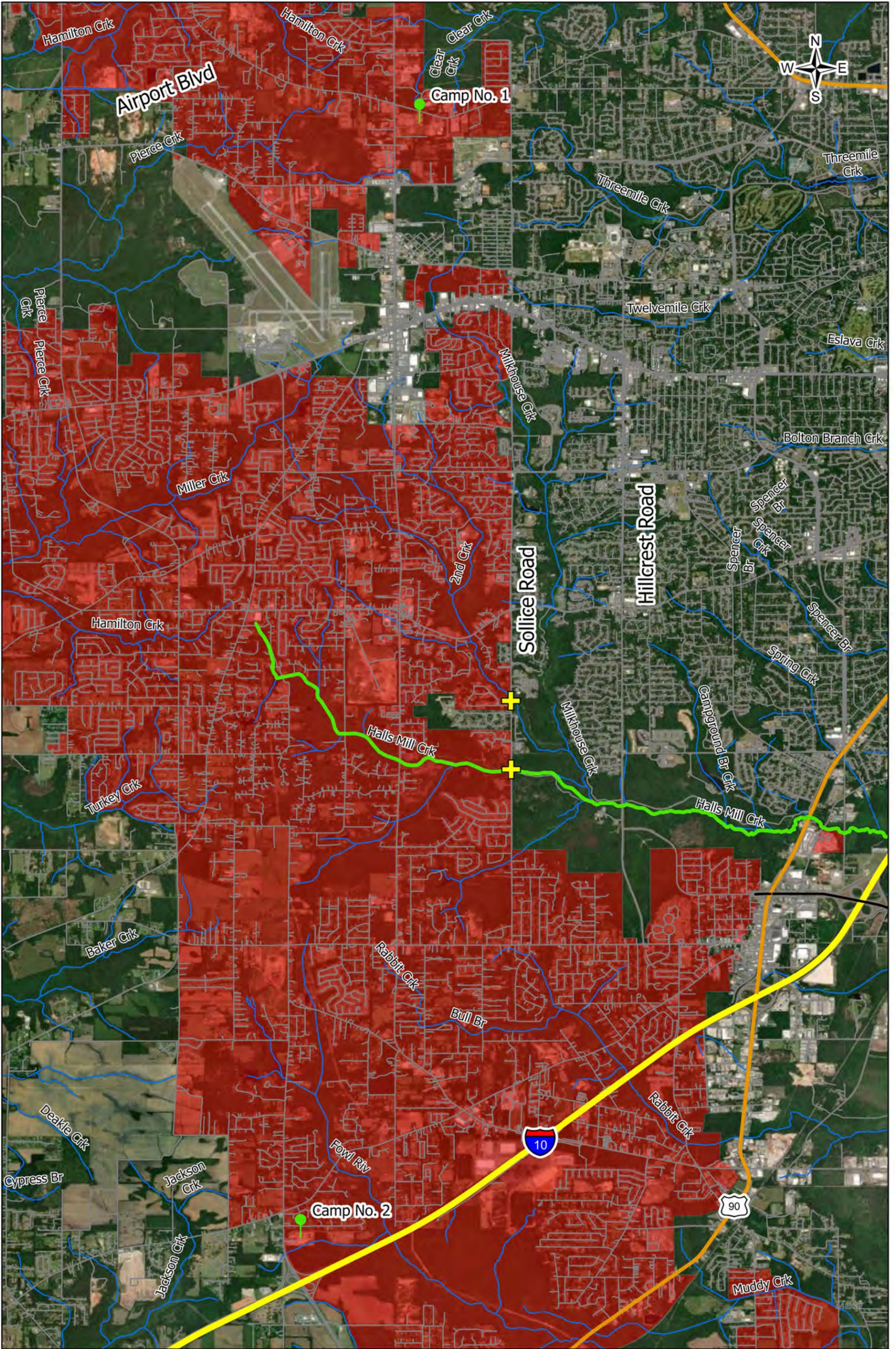
#### 7.2.1. Facility Inventory

The first step is to evaluate and assess areas and facilities, within the MS4 Area, to determine which activities may currently have a impact on water quality and to find solutions for these activities. The simplest solution is to limit the number of activities that are performed outside and exposed to storm water.

Since the limits of the Urbanized Area expanded because of the 2020 Census, the County has identified two (2) facilities located within the MS4 Area that have a potential to interact with storm water runoff. Facilities located within the MS4 Area are listed in Table 7-1 and shown in Figure 7-1.

**Table 7-1 County Facility Inventory**

Name	Address	City
Camp No. 1	1150 Schillinger Road	Mobile
Camp No. 2	7075 McDonald Road	Irvington



**Mobile County**  
County Facilities & Monitoring Locations

**Figure 7-1**  
March 2023



### **7.2.2. Facility Inspections**

The County shall develop an inspection check list and/or form for each facility located within the MS4 Area. Upon development of the inspection check list and/or form, the County shall conduct inspections of each facility on an annual basis.

### **7.2.3. Standard Operating Procedures**

The County shall evaluate each County facility to determine if any facility operations should have a Standard Operating Procedures (SOPs). SOPs developed for facility operations shall be included in Appendix F.

### **7.2.4. Litter Control**

The County's Environmental Enforcement Department has a litter crew and a litter picker crew. The litter crew summarizes the areas which were cleared of litter and tracks the amount of waste collected.

### **7.2.5. Street Sweeping**

The County has two (2) street sweepers and a vacuum truck sweeper to perform routine street sweeping. The vacuum truck sweeper has the capability to clean inlets.

### **7.2.6. Environmental Enforcement**

The primary responsibility of the Environmental Enforcement Department is to enforce the Mobile County Junk Control Ordinance and the Alabama State Litter Laws in the unincorporated areas of Mobile County. Environmental Enforcement responds to citizen complaints that allege a violation of the ordinances, laws, and regulations to determine if a violation has occurred.

Environmental Enforcement Officers investigate complaints regarding illegal dumping of junk and garbage on commercial and residential properties. Based on the findings of the investigation, the Environmental Enforcement Officer may issue a verbal warning, written warning, or a civil citation for observed violations.

### **7.2.7. Training**

The County has trained Public Works, Road and Bridge, and Environmental Enforcement department employees in general awareness to identify potential non-stormwater discharges into the County's storm sewer system. Types of non-stormwater discharges that may be observed include but are not limited to sanitary



sewer overflow, oily, soapy, discolored water, construction runoff, chemicals, trash, paint, etc. As part of the training and IDDE Card was provided for each county vehicle. The IDDE Card provides direction to County employees on how to report a suspect non stormwater discharge. A copy of the IDDE Card is provided in Appendix F.

### **7.3. Program Goals and Evaluation**

The County has developed realistic, achievable, and measurable goals, and performance milestones to measure the progress in implementing a pollution prevention / good housekeeping program. Program goals are summarized in Table 7-2.

The most basic measure to evaluate the program effectiveness is to evaluate whether the program goals are being met. At the end of the permit year, the County shall evaluate the program goals and overall effectiveness of the program to help reduce pollutants in storm water runoff. The results of the program evaluation will be summarized in the Annual Report.



**Table 7-1 Pollution Prevention / Good Housekeeping – Program Goals**

Program Component	Description	Frequency	Schedule	Responsible Department
Municipal Facilities	Facility Inventory	1 / year	31 March 2024	Environmental Services
	Facility Inspection Form	Develop	31 January 2024	
	Facility Inspection	1 / year	31 March 2024	
	Standard Operating Procedures (SOPs)	Evaluate / Develop	31 March 2024	
Roads	Litter Crew	Track	31 March 2024	Environmental Enforcement
	Junk / Litter Enforcement	Track	31 March 2024	
	Street Sweeping	Track	31 March 2024	Public Works
Training	Training Activities	Track	31 March 2024	Environmental Services
Environmental Enforcement	Junk Control Ordinance	Track	31 March 2024	Environmental Enforcement
Program Evaluation	Evaluate Program Effectiveness	1 / year	31 March 2024	Environmental Services



## SECTION 8

Monitoring



## 8. Monitoring

### 8.1. Introduction

In accordance with Part V of the NPDES Permit, the County is required to develop a monitoring plan if the County contributes to the impairment of a waterbody located within the MS4 Area that is listed on the latest final 303(d) list, designated impaired by ADEM, or a TMDL is approved by EPA. A discussion of impaired waterbodies located within the County's MS4 and the County's potential contribution to an impaired waterbody is provided in Section 2.2 of this SWMP Plan.

Based on the County's review of impaired waterbodies with an EPA approved TMDL, the primary source of pollution contributing to impaired waterbodies is attributed to municipal collection system failure or onsite wastewater treatment systems. Since the County does not own, operate, or maintain any wastewater collection or treatment systems, the County cannot confidently determine if it is a contributor to waterbodies impaired for pathogens or organic enrichment. Until the sources of SSOs are eliminated, it is a waste of effort and resources for the County to perform monitoring on waterbodies impaired for pathogens or organic enrichment.

Halls Mill Creek has been identified as an impaired stream for siltation on the 2022 final 303(d) list. Since construction activities may contribute to an impairment for siltation, the County has developed a monitoring plan to evaluate the potential impacts of its MS4 on Halls Mill Creek.

### 8.2. Monitoring Locations

The County has identified monitoring locations on Halls Mill Creek to evaluate siltation. Monitoring locations are summarized in Table 8-1 and shown in Figure 7-1.

**Table 8-1 Monitoring Locations**

Waterbody	Latitude	Longitude
Halls Mill Creek	30.615756	-88.207742
Second Creek	30.626192	-88.207791



### **8.3. Monitoring Parameters**

Halls Mill Creek has a water use classification of Fish and Wildlife. Specific water quality criteria associated with the Fish and Wildlife water use classification, as defined in ADEM Rule 335-6-10-.09(5), states that turbidity will not cause a substantial visible contrast with the natural appearance of waters or exceed 50 Nephelometric Units.

The County shall analyze samples, collected at each monitoring location, for turbidity. Analysis shall be performed in accordance with the methods specified at 40 CFR Part 136.

### **8.4. Sample Type and Frequency**

The County shall collect grab samples on a quarterly basis at each monitoring location. Sample collection shall be performed in accordance with the methods specified at 40 CFR Part 136.

### **8.5. Sample Handling**

To minimize the chance of sample contamination and unreliable analytical results, special measures must be taken during the collection, treatment, and handling of samples prior to analysis.

#### **8.5.1. Sample Collection Protocols**

Water quality sampling shall employ "clean" sampling techniques to minimize potential sources of sample contamination – particularly from trace pollutants. Experience has shown that when clean sampling techniques are used, detected concentrations of constituents tend to be lower.

Clean sample collection techniques that should be followed during the collection of water samples are described below. Care must be taken during sampling to minimize exposure of the samples to human, atmospheric, and other potential sources of contamination. Care must also be taken to avoid contamination whenever handling containers and lids. To reduce potential contamination, monitoring personnel shall adhere to the following rules while collecting water samples:

- Do not eat, drink, or smoke during sample collection;
- Never sample near a running vehicle;



- Do not park vehicles in immediate sample collection area (even non-running vehicles);
- Always wear clean, powder-free nitrile gloves when handling sample containers and lids;
- Never touch the inside surface of a sample container or lid, even with gloved hands;
- Never allow the inner surface of a sample container or lid to be contacted by any material other than the sample water;
- Do not overfill sample containers (preservative may be lost);
- Never allow any object or material to fall into or contact the collected sample water;
- Avoid allowing rainwater to drip from rain gear or other surfaces into sample containers; and,
- Replace and tighten sample container lids immediately after sample collection.

Sampling sites should be approached from downstream whenever possible to minimize any streambed disturbance that could influence water quality. Be careful that the flow is not concentrated to the point the channel starts to erode and increases the amount of sediment in the water. Samples shall be collected while facing upstream. When filling a sample bottle, lower the bottle slowly into the water to avoid hitting the streambed, disturbing the bottom, and stirring up sediment.

### **8.5.2. Manual Grab Sample Technique**

A manual grab sample will define water quality at a distinct point in time. Grab samples are easily collected and are favored when the anticipated water quality of the discharge is homogeneous, or unchanging, in nature. A manual grab sample is an individual sample of at least 100 milliliters usually collected by direct submersion of each individual sample bottle into the water to be sampled. To collect samples, the water depth will need to be at least 0.5 inch. Filling a sample bottle is difficult when the water is shallow, and the bottles cannot be completely submerged. Thus, an intermediate container may be used. For example, one clean, unpreserved sample bottle can be designated as the intermediate container and used to collect multiple grab samples to fill the remaining sample bottles. Fill the bottles as full as possible without overfilling.



### **8.5.3. Sample Preservation**

Since the turbidity analysis is performed at the time of sample collection, sample preservation is not required.

### **8.5.4. Chain of Custody**

Since the turbidity analysis is performed at the time of sample collection and the results are recorded in the field, a chain of custody is not required.

### **8.5.5. Sample Analysis**

Analysis shall be conducted according to test procedures approved by EPA under 40 CFR Part 136.

## **8.6. Data Evaluation**

The County shall review water quality data collected and present a summary of the data in the Annual Report. Graphical representations of the data shall be included in the Annual Report.

## **8.7. Program Goals and Evaluation**

The County has developed realistic, achievable, and measurable goals, and performance milestones to measure the progress in implementing a pollution prevention / good housekeeping program. Program goals are summarized in Table 7-2.

The most basic measure to evaluate the program effectiveness is to evaluate whether the program goals are being met. At the end of the permit year, the County shall evaluate the program goals and overall effectiveness of the program to help reduce pollutants in storm water runoff. The results of the program evaluation will be summarized in the Annual Report.

